

401 KAR 51:017. Prevention of significant deterioration of air quality.

RELATES TO: KRS 224.10-100, 40 C.F.R. 51 Subpart I, Appendix S, Section IV, Part 51, Appendix W, 51.166, 52.21, Part 58, Appendix B, 60, 61, 63, 81.318, 81 Subpart D, 42 U.S.C. 7401-7671q (Clean Air Act), 4321-4370d (National Environmental Policy Act)

STATUTORY AUTHORITY: KRS 224.10-100, 40 C.F.R. 51.166, 52.21, 42 U.S.C. 7401-7671q (Clean Air Act)

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Environmental and Public Protection Cabinet to promulgate administrative regulations for the prevention, abatement and control of air pollution. This administrative regulation provides for the prevention of significant deterioration of ambient air quality. The provisions of this administrative regulation are not different nor more stringent than the federal regulation, 40 C.F.R. 51.166.

Section 1.. Applicability. (1) This administrative regulation shall apply to the construction of a new major stationary source or any project at an existing major stationary source that commences construction after September 22, 1982, and locates in an area designated attainment or unclassifiable under 42 U.S.C. 7407(d)(1)(A)(ii) and (iii).

(2) Except as otherwise provided in this administrative regulation, the provisions of Sections 8 to 16 of this administrative regulation shall apply to the construction of a new major stationary source or a major modification of an existing major stationary source.

(3) The owner or operator of a new major stationary source or major modification, which is subject to the requirements of Sections 8 to 16 of this administrative regulation, shall not begin actual construction without a proposed permit or proposed permit revision issued under 401 KAR 52:020 stating that the major stationary source or major modification shall meet those requirements.

(4) Applicability tests for projects. Except as provided in subsection (5) or (6) of this section, a project shall be a major modification for a regulated NSR pollutant only if the project causes a significant emissions increase and a significant net emissions increase as provided in paragraphs (a) and (b) of this subsection.

(a) Prior to beginning actual construction, the owner or operator shall first determine if a significant emissions increase will occur for the applicable type of unit being constructed according to subparagraphs 1 to 4 of this paragraph.

1. Actual-to-projected actual applicability test for projects that only involve existing emissions units. A significant emissions increase of a regulated NSR pollutant shall be projected to occur if the sum of the difference between the projected actual emissions and the baseline actual emissions for each existing emissions unit equals or exceeds the significant amount for that pollutant.

2. Actual-to-potential test for projects that involve only construction of new emissions units. A significant emissions increase of a regulated NSR pollutant shall be projected to occur if the sum of the potential to emit from each new emissions unit following completion of the project equals or exceeds the significant amount for that pollutant.

3. Emissions test for projects that involve clean units. An emission increase shall not be deemed to occur for a project that will be constructed and operated at a clean unit without causing the unit to lose its clean unit designation as provided in Sections 20 and 21 of this administrative regulation.

4. Hybrid test for projects that involve multiple types of emissions units. A significant emissions increase of a regulated NSR pollutant shall be projected to occur if the sum of the emissions increases for each emissions unit, using a method specified in subparagraphs 1 to 3 of this paragraph as applicable for each emissions unit, equals or exceeds the significant amount for that pollutant.

(b) Prior to beginning actual construction and after completing the applicable procedure of paragraph (a) of the subsection, the owner or operator shall determine for each regulated NSR pollutant if a significant net emissions increase will occur pursuant to 401 KAR 51:001, Section 1(146).

(5) For a plant-wide applicability limit (PAL) for a regulated NSR pollutant at a major stationary source, the owner or operator of the major stationary source shall comply with the applicable requirements of Section 23 of this administrative regulation.

(6) An owner or operator undertaking a pollution control project (PCP) shall comply with Section 22 of this administrative regulation.

Section 2. Ambient Air Increments. (1) In areas designated as Class I or II, increases in pollutant concentration over the baseline concentration shall be limited to the following levels:

Pollutant	Maximum Allowable Increase (Micrograms per cubic meter)
Class I	
Particulate Matter:	
PM ₁₀ , annual arithmetic mean	4
PM ₁₀ , 24-hour maximum	8
Sulfur Dioxide:	
Annual arithmetic mean	2
24-hour maximum	5
3-hour maximum	25
Nitrogen Dioxide:	
Annual arithmetic mean	2.5
Class II	
Particulate Matter:	
PM ₁₀ , annual arithmetic mean	17
PM ₁₀ , 24-hour maximum	30
Sulfur Dioxide:	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	512
Nitrogen Dioxide:	
Annual arithmetic mean	25

(2) For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one (1) such period per year at any one (1) location.

Section 3. Ambient Air Ceilings. The concentration of a regulated NSR pollutant shall not exceed the concentration allowed under the national secondary ambient air quality standard or under the national primary ambient air quality standard, whichever concentration is lower for the pollutant for a period of exposure.:

Section 4. Restrictions on Area Classifications. (1) The following areas which were in existence on August 7, 1977, shall be Class I areas and shall not be redesignated:

- (a) International parks;
- (b) National wilderness areas and national memorial parks which exceed 5,000 acres in size; and
- (c) National parks which exceed 6,000 acres in size.

(2) Any other area, unless otherwise specified in the legislation creating the area, is designated Class II but may be redesignated as provided in 40 C.F.R. 51.166(g).

(3) The visibility protection requirements of this administrative regulation shall apply only to sources which may impact a mandatory Class I federal area.

(4) The following areas may be redesignated only as Class I or II:

- (a) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and
- (b) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

Section 5. Exclusions from Increment Consumption. (1) The cabinet may, after notice and opportunity for at least one (1) public hearing to be held in accordance with procedures established in 401 KAR 52:100, exclude the following concentrations in determining compliance with a maximum allowable increase:

(a) Concentrations attributable to the increase in emissions from stationary sources that have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under a federal statute or regulation over the emissions from these sources before the effective date of the order;

(b) Concentrations attributable to the increase in emissions from sources that have converted from using natural gas by reason of a natural gas curtailment plan in effect pursuant to a federal statute over the emissions from those sources before the effective date of the plan;

(c) Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities of new or modified sources; and

(d) Concentrations attributable to the temporary increase in emissions of sulfur dioxide, particulate matter, or nitrogen oxides from stationary sources that are affected by plan revisions approved by the Administrator of the U.S. EPA as meeting the criteria specified in subsection (3) of this section.

(2) Exclusion of concentrations shall not apply more than five (5) years after the effective date of the order to which subsection (1)(a) of this section refers or the curtailment plan to which subsection (1)(b) of this section refers, whichever is applicable. If both an order and curtailment plan are applicable, an exclusion shall apply more than five (5) years after the later of the two (2) effective dates.

(3) For excluding concentrations pursuant to subsection (1)(d) of this section:

(a) The time period over which the temporary emissions increase of sulfur dioxide, particulate matter, or nitrogen oxides would occur shall be specified and shall not exceed two (2) years in duration unless a longer time is approved by the U.S. EPA;

(b) The time period for excluding certain contributions in accordance with paragraph (a) of this subsection shall not be renewable;

(c) An emissions increase from a stationary source shall not occur that will:

1. Impact a Class I area or an area in which an applicable increment is known to be violated; or

2. Cause or contribute to the violation of a national ambient air quality standard; and

(d) Limitations shall be in effect at the end of the time period established in paragraph (a) of this subsection, which ensure that the emissions levels from stationary sources affected by the SIP revision shall not exceed the levels occurring from those sources before the revision was approved.

Section 6. Stack Heights. (1) The degree of emissions limitation required for control of an air pollutant under this administrative regulation shall not be affected by:

(a) So much of the stack height of a source as exceeds good engineering practice; or

(b) Another dispersion technique.

(2) Subsection (1) of this section shall not apply to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before then.

Section 7. Exemptions. (1) Sections 8 to 16 of this administrative regulation shall not apply to a particular major stationary source or major modification, if:

(a) The owner or operator:

1. Obtained the necessary federal, state, and local preconstruction approval effective before September 22, 1982;

2. Commenced construction before September 22, 1982; and

3. Did not discontinue construction for a period of eighteen (18) months or more.

(b) The major stationary source is a nonprofit health institution, a nonprofit educational institution, or a major modification at such an institution, and the Governor of the Commonwealth of Kentucky requests that it be exempt from those requirements.

(c) The source or modification is a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the following categories:

1. Coal cleaning plants with thermal dryers;

2. Kraft pulp mills;

3. Portland cement plants;

4. Primary zinc smelters;

5. Iron and steel mills;

6. Primary aluminum ore reduction plants;

7. Primary copper smelters;

8. Municipal incinerators capable of charging more than 250 tons of refuse per day;

9. Hydrofluoric, sulfuric, or nitric acid plants;

10. Petroleum refineries;

11. Lime plants;

12. Phosphate rock processing plants;

13. Coke oven batteries;

14. Sulfur recovery plants;

15. Carbon black plants, furnace process;

16. Primary lead smelters;

17. Fuel conversion plants;

18. Sintering plants;

19. Secondary metal production plants;

20. Chemical process plants;

21. Fossil-fuel boilers, or combination of fossil-fuel boilers, totaling more than 250 million BTUs per hour heat input;

22. Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;

23. Taconite ore processing plants;

24. Glass fiber processing plants;

25. Charcoal production plants;

26. Fossil fuel-fired steam electric plants of more than 250 million BTUs per hour heat input; or

27. Another stationary source category which, as of August 7, 1980, is being regulated under 42 U.S.C. 7411 or 7412.

(d) The source or modification is a portable stationary source that has previously received a permit under this administrative regulation; and

1. The owner or operator proposes to relocate the source and emissions of the source at the new location will be temporary;

2. The emissions from the source will not exceed its allowable emissions;

3. The emissions from the source will not impact a Class I area or an area where an applicable increment is known to be violated; and

4. Reasonable notice is given to the cabinet prior to the relocation identifying the proposed new location and the probable duration of operation at the new location. Notice shall be given to the cabinet not less than ten (10) days in advance of the proposed relocation unless a different time duration is previously approved by the cabinet.

(e) The source or modification was not subject to this administrative regulation with respect to particulate matter requirements in effect before July 31, 1987, and the owner or operator:

1. Obtained all final federal, state, and local preconstruction approvals or permits necessary under the applicable SIP before July 31, 1987;

2. Commenced construction within eighteen (18) months after July 31, 1987; and

3. Did not discontinue construction for a period of eighteen (18) months or more and completed construction within a reasonable period of time.

(f) The source or modification was subject to this administrative regulation for particulate matter requirements in effect before July 31, 1987, and the owner or operator submitted an application for a permit under the applicable permit program before that date, and the cabinet subsequently determined that the application as submitted was complete with respect to the particulate matter requirements then in effect.

(2) Sections 8 to 16 of this administrative regulation shall not apply to a major stationary source or major modification for a particular pollutant if the owner or operator demonstrates that, for that pollutant, the source or modification is located in an area designated as nonattainment pursuant to 42 U.S.C. 7407(d)(1)(A)(i).

(3) Sections 9, 11, and 13 of this administrative regulation shall not apply to a proposed major stationary source or major modification for a particular pollutant, if the allowable emissions of that pollutant from the source, or the net emissions increase of that pollutant from a modification:

(a) Will not impact a Class I area or an area where an applicable increment is known to be violated; and

(b) Will be temporary.

(4) Sections 9, 11, and 13 of this administrative regulation, as applicable to a maximum allowable increase for a Class II area, shall not apply to a major modification at a stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each regulated NSR pollutant from the modification after the application of BACT will be less than fifty (50) tons per year.

(5) The cabinet may exempt a proposed major stationary source or major modification from the monitoring requirements of Section 11 of this administrative regulation for a particular pollutant, if:

(a) The emissions increase of the pollutant from the new source or the net emissions increase of the pollutant from the modification will cause air quality impacts in an area, which are less than the amounts listed in the following table; or

Pollutant	Air Quality Level	Averaging Time
Carbon monoxide	575 $\mu\text{g}/\text{m}^3$	8-hour average
Nitrogen dioxide	14 $\mu\text{g}/\text{m}^3$	annual average
Particulate matter	10 $\mu\text{g}/\text{m}^3$ of PM_{10}	24-hour average
Sulfur dioxide	13 $\mu\text{g}/\text{m}^3$	24-hour average
Ozone	No de minimis air quality level is provided for ozone. However, a net increase of 100 tons per year or more of volatile organic compounds subject to this administrative regulation is required to perform an ambient impact analysis including the gathering of ambient air quality data.	
Lead	0.1 $\mu\text{g}/\text{m}^3$	3-month average
Fluorides	0.25 $\mu\text{g}/\text{m}^3$	24-hour average
Hydrogen sulfide	0.2 $\mu\text{g}/\text{m}^3$	1-hour average
Total reduced sulfur	10 $\mu\text{g}/\text{m}^3$	1-hour average
Reduced sulfur compounds	10 $\mu\text{g}/\text{m}^3$	1-hour average

(b) The concentrations of the pollutant in the area that the source or modification will affect are less than the concentrations listed in the table in paragraph (a) of this subsection, or the pollutant is not listed in the table.

(6) Permitting requirements equivalent to Section 9(2) of this administrative regulation shall not apply to a stationary source or modification for a maximum allowable increase for nitrogen oxides, if:

(a) The owner or operator of the source or modification submitted an application for a permit or permit revision under the applicable permit program before the date on which the provisions embodying the maximum allowable increase took effect in the Kentucky SIP; and

(b) The cabinet subsequently determined that the application as submitted before that date was complete.

(7) Permitting requirements equivalent to Section 10(2) of this administrative regulation shall not apply to a stationary source or modification for a maximum allowable increase for PM_{10} , if:

(a) The owner or operator of the source or modification submitted an application for a permit under the applicable permit program before the provisions embodying the maximum allowable increases for PM_{10} took effect as part of Kentucky's SIP; and

(b) The cabinet subsequently determined that the application as submitted before that date was complete.

(8)(a) The cabinet may determine that the requirements for air quality monitoring of PM_{10} in Section 11 of this administrative regulation shall not apply to a particular source or modification, if:

1. The owner or operator of the source or modification submitted an application for a permit under this section on or before June 1, 1988; and

2. The cabinet subsequently determines that the application as submitted before that date was complete, except for the requirements for monitoring particulate matter specified in Section 11 of this administrative regulation.

(b) The requirements for air quality monitoring of PM_{10} in Section 11 of this administrative regulation shall apply to a particular source or modification if the owner or operator of the source or modification submitted an application for a permit under 40 C.F.R. 52.21 or this administrative regulation after June 1, 1988, and no later than December 1, 1988.

1. The data shall have been gathered over at least the period from February 1, 1988, to the date the application becomes complete in accordance with Section 11 of this administrative regulation; and

2. If the cabinet determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period, which may not be less than four (4) months, the data that Section 11 of this administrative regulation requires shall have been gathered over that shorter period.

(9) The requirements of Section 9(2) of this administrative regulation shall not apply to a stationary source or modification for a maximum allowable increase for PM₁₀, if:

(a) The owner or operator of the source or modification submitted an application for a permit under 40 C.F.R. 52.21 or this administrative regulation before the date the provisions embodying the maximum allowable increases for PM₁₀ took effect, and the cabinet subsequently determined that the application as submitted before that date was complete.

(b) Instead, the requirements of Section 9(2) shall apply for the maximum allowable increases for TSP as in effect on the day the application was submitted.

Section 8. Control Technology Review. (1) A major stationary source or major modification shall meet each applicable emissions limitation under the Kentucky SIP and each applicable emissions standard and standard of performance under 40 C.F.R. Parts 60 and 61.

(2) A new major stationary source shall apply BACT for each regulated NSR pollutant for which the source has the potential to emit in significant amounts.

(3) A major modification shall apply BACT:

(a) For each regulated NSR pollutant that results in a significant net emissions increase at the source; and

(b) For each proposed emissions unit at which a net emissions increase in the pollutant occurs as a result of a physical change or change in the method of operation of the unit.

(4) For phased construction projects:

(a) The cabinet shall review and modify, as appropriate, the BACT determination at the latest reasonable time occurring no later than eighteen (18) months prior to commencement of construction of each independent phase of the project; and

(b) The owner or operator of the applicable stationary source may then be required to demonstrate the adequacy of a previous BACT determination for the source.

Section 9. Source Impact Analysis. The owner or operator of the proposed source or modification shall demonstrate that allowable emissions increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions, including secondary emissions, shall not cause or contribute to air pollution in violation of:

(1) A national ambient air quality standard in an air quality control region; or

(2) An applicable maximum allowable increase over the baseline concentration in any area.

Section 10. Air Quality Models. (1) Estimates of ambient concentrations shall be based on the applicable air quality models, data bases, and other requirements specified in 40 C.F.R. Part 51, Appendix W, "Guideline on Air Quality Models" (2003), Appendix A".

(2) If an air quality model specified in 40 C.F.R. Part 51, Appendix W, is inappropriate, the model may be modified or another model substituted.

(a) The use of a modified or substitute model shall be:

1. Subject to notice and opportunity for public comment under 401 KAR 52:100; and

2. Made on a case-by-case basis and receive written approval from the U.S. EPA

(b) Methods similar to those outlined in the "Workbook for the Comparison of Air Quality Models," specified in 401 KAR 50:040, Section 1(3), shall be used to determine the comparability of air quality models.

Section 11. Air Quality Analysis. (1) Preapplication analysis.

(a) An application for a permit or permit revision under 401 KAR 52:020 and this administrative regulation shall contain an analysis of ambient air quality in the area that the major stationary source or major modification will affect for each of the following:

1. For a source, each pollutant that the source will have the potential to emit in a significant amount;

2. For a modification, each pollutant that the modification will result in a significant net emissions increase.

(b) For a pollutant that does not have a national ambient air quality standard, the analysis shall contain air quality monitoring data the cabinet determines necessary to assess ambient air quality for that pollutant in an area that the emissions of that pollutant will affect.

(c) For pollutants, other than nonmethane hydrocarbons, for which a standard exists, the analysis shall contain continuous air quality monitoring data gathered to determine if emissions of that pollutant will cause or contribute to a violation of the standard or a maximum allowable increase.

(d) 1. The required continuous air quality monitoring data shall have been gathered over a period of at least one (1) year and shall represent at least the year preceding receipt of the application.

2. If the cabinet determines that a complete and adequate analysis may be accomplished with monitoring data gathered over a period shorter than one (1) year, that period shall be not less than four (4) months.

(e) For analysis of volatile organic compounds, the owner or operator of a proposed major stationary source or major modification who satisfies all conditions of 40 C.F.R. Part 51, Appendix S, section IV may provide postapproval monitoring data for ozone instead of providing preconstruction data as required in this section.

(f) For air quality monitoring of PM₁₀ under Section 7(8)(a) and (b) of this administrative regulation, the owner or operator of the source or major modification shall use a monitoring method approved by the cabinet and shall estimate the ambient concentrations of PM₁₀ using the data collected by that approved monitoring method in accordance with estimating procedures approved by the cabinet.

(2) Postconstruction monitoring. After construction of a major stationary source or major modification, the owner or operator shall conduct ambient monitoring that the cabinet determines is necessary to determine the effect emissions from the stationary source or modification may have, or are having, on air quality in an area.

(3) Operation of monitoring stations. During the operation of air quality monitoring stations, the owner or operator of a major stationary source or major modification shall meet the requirements of 40 C.F.R. Part 58, Appendix B to satisfy the air quality analysis requirements of this section.

Section 12. Source Information. The owner or operator of a proposed source or modification shall submit to the cabinet all information necessary to perform an analysis or make a determination required under this administrative regulation.

(1) The information shall include:

(a) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;

(b) A detailed schedule for construction of the source or modification; and

(c) A detailed description of the system of continuous emissions reduction planned for the source or modification, emissions estimates, and other information necessary to determine that BACT will be applied.

(2) Upon request of the cabinet, the owner or operator shall also provide information on:

(a) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate the impact; and

(b) The air quality impacts and the nature and extent of general commercial, residential, industrial, and other growth that has occurred since August 7, 1977, in the area the source or modification will affect.

Section 13. Additional Impact Analysis. (1) The owner or operator shall provide an analysis of the impairment to visibility, soils and vegetation that will occur as a result of:

- (a) The source or modification; and
 - (b) General commercial, residential, industrial and other growth associated with the source or modification.
- (2) The owner or operator shall not be required to provide an analysis of the impact on vegetation having no significant commercial or recreational value.
- (3) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.
- (4) Visibility monitoring.
- (a) The cabinet may require monitoring of visibility in a Class I area impacted by the proposed new stationary source or major modification using:
 - (1) Human observations;
 - (2) Teleradiometers;
 - (3) Photographic cameras;
 - (4) Nephelometers;
 - (5) Fine particulate monitors; or
 - (6) Other appropriate methods as specified by the U.S. EPA.
 - (b) The method selected shall be determined on a case-by-case basis by the cabinet.
 - (c) Visibility monitoring required by the cabinet in a Class I area shall be approved by the federal land manager.
 - (d) Data obtained from visibility monitoring shall be made available to the cabinet, the U.S. EPA, and the federal land manager, upon request.

Section 14. Sources Impacting Class I Areas; Additional Requirements. (1) Notice to U.S. EPA and federal land managers. The cabinet shall provide;

(a) Written notice to the U.S. EPA, the federal land manager, and the federal official charged with direct responsibility for management of lands within a Class I area of a permit application for a proposed major stationary source or major modification that may affect the Class I area.

- (b) Notice promptly after receiving the permit application. The notice shall:
1. Include a copy of all information relevant to the permit application;
 2. Be given within thirty (30) days of receipt and at least sixty (60) days prior to the public hearing on the application for a permit to construct;
 3. Include an analysis of the proposed source's anticipated impacts on visibility in the Class I area.
- (c) The cabinet shall also provide the federal land manager and other federal officials with a copy of the preliminary determination and shall make available to them the materials used in making that determination, promptly after the cabinet makes it. The cabinet shall also notify all affected federal land managers within thirty (30) days of receipt of an advanced notification of the permit application.
- (2) Federal land manager. The federal land manager and the federal official charged with direct responsibility for management of lands located in a Class I area shall have an affirmative responsibility to protect visibility and other air quality related values of the lands and to consider, in consultation with the cabinet, if a proposed source or modification will have an adverse impact on those values.

(3) Visibility analysis.

(a) The cabinet shall consider an analysis performed by the federal land manager, which is provided within thirty (30) days of the notice and analysis required by subsection (1) of this section, which shows that a proposed new major stationary source or major modification may have an adverse impact on visibility in a Class I area.

(b) If the cabinet finds the analysis does not demonstrate to the cabinet's satisfaction that an adverse impact on visibility will result in the Class I area, the cabinet shall, in the public notice required in 401 KAR 52:100, either explain that decision or give notice as to where the explanation may be obtained.

(4) Denial; impact on air quality related values.

(a) The federal land manager of lands located in a Class I area may demonstrate to the cabinet that the emissions from a proposed source or modification will have an adverse impact on the visibility and other air quality related values of those lands, even though the change in air quality resulting from emissions from the proposed source or modification will not cause or contribute to concentrations that will exceed the maximum allowable increases for a Class I area.

(b) If the cabinet concurs with the demonstration specified in paragraph (a) of this subsection, the cabinet shall not issue the permit or permit revision.

(5) Class I variances.

(a) The owner or operator of a proposed source or modification may demonstrate to the federal land manager that the emissions from the source or modification will have no adverse impact on the visibility or other air quality related values of lands located in a Class I area, even though the change in air quality resulting from emissions from the source or modification will not cause or contribute to concentrations that will exceed the maximum allowable increases for a Class I area as specified in Section 2(1) of this administrative regulation.

(b) If the federal land manager concurs with the demonstration specified in paragraph (a) of this subsection and he so certifies, the cabinet may, if the other applicable requirements of this administrative regulation are met, issue the permit or permit revision with emissions limitations that are necessary to assure that emissions of sulfur dioxide, particulate matter, and nitrogen oxides will not exceed the maximum allowable increases over minor source baseline concentration for the pollutants as specified in Section 2(1) of this administrative regulation.

(6) Sulfur dioxide variance by governor with federal land manager's concurrence.

(a) The owner or operator of a proposed source or modification, which cannot be approved under subsection (5) of this section because the source cannot be constructed without exceeding a maximum allowable increase in sulfur dioxide applicable to a Class I area for a period of twenty-four (24) hours or less, may demonstrate to the Governor of the Commonwealth of Kentucky that a variance will not adversely affect the visibility or other air quality related values of the area.

(b) The governor, after consideration of the federal land manager's recommendation, if applicable, and subject to his concurrence, may, after notice and public hearing, grant a variance from the maximum allowable increase.

(c) If a variance is granted, the cabinet shall issue a permit or permit revision to the source or modification under the requirements of 401 KAR Chapter 52 if the other applicable requirements of this administrative regulation are met.

(7) Variance by the governor with the President's concurrence.

(a) If the Governor of the Commonwealth of Kentucky recommends a variance in which the federal land manager does not concur, the recommendations of the governor and the federal land manager shall be transmitted to the President of the United States of America.

(b) If the variance is approved by the President, the cabinet shall issue a permit or permit revision in accordance with the requirements of 401 KAR Chapter 52, if the other applicable requirements of this administrative regulation are met.

(8) Emissions limitations for presidential or gubernatorial variance. For a permit or permit revision issued pursuant to subsections (6) or (7) of this section the source or modification shall comply with the emissions limitations necessary to assure that:

(a) Emissions of sulfur dioxide from the source or modification shall not, during a day on which the other applicable maximum allowable increases are exceeded, cause or contribute to concentrations that will exceed the maximum allowable increases over the baseline concentration as specified in the following table; and

Maximum Allowable Increase (Micrograms per cubic meter)		
Terrain areas		
Period of Exposure	Low	High
24-hour maximum	36	62
3-hour maximum	130	221

(b) Emissions shall not cause or contribute to concentrations that exceed other applicable maximum allowable increases for periods of exposure of twenty-four (24) hours or less for more than a total of eighteen (18) days which are not necessarily consecutive during an annual period.

Section 15. Public Participation. The cabinet shall follow the applicable procedures of 401 KAR 52:100, and 40 C.F.R. 51.166(q) and this administrative regulation in processing applications under this administrative regulation.

Section 16. Source Obligation. (1) An owner or operator of a source or modification subject to this administrative regulation who begins actual construction after September 22, 1982, shall construct and operate the source or modification in accordance with the application submitted to the cabinet under this administrative regulation and 401 KAR 52:020 or under the terms of an approval to construct.

(2)(a) Approval to construct shall become invalid if construction:

1. Is not commenced within eighteen (18) months after receipt of the approval;
2. Is discontinued for a period of eighteen (18) months or more; or
3. Is not completed within a reasonable time.

(b) The cabinet may extend the eighteen (18) month period upon a satisfactory showing that an extension is justified.

1. An extension shall not apply to the time period between construction of the approved phases of a phased construction project; and
2. Each phase shall commence construction within eighteen (18) months of the projected and approved commencement date.

(3) Approval to construct shall not relieve an owner or operator of the responsibility to comply fully with 401 KAR Chapters 50 to 68 and other requirements of local, state, or federal law.

(4) If a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in an enforceable limitation that was established after August 7, 1980, on the capacity of the source or modification to emit a pollutant, Sections 8 to 16 of this administrative regulation shall apply to the source or modification as though construction had not yet commenced on the source or modification.

(5)(a) The provisions of this subsection shall apply to projects at existing emissions units at a major stationary source other than projects at a clean unit or at a source with a PAL, if:

1. There is a reasonable possibility that a project that is not part of a major modification may result in a significant emissions increase; and
2. The owner or operator elects to use the method specified in 401 KAR 51:001, Section 1(202)(b) to calculate projected actual emissions.

(b) Before beginning actual construction of a project specified in paragraph (a) of this subsection, the owner or operator shall document and maintain a record of the following information:

1. A description of the project;
2. Identification of the emissions units for which emissions of a regulated NSR pollutant could be affected by the project; and
3. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - a. Baseline actual emissions;
 - b. Projected actual emissions;
 - c. Amount of emissions excluded in calculating projected actual emissions and an explanation for why that amount was excluded; and
 - d. Any applicable netting calculations.

(c) For a project specified in paragraph (a) of this subsection, the owner or operator shall:

1. Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that are emitted by any emissions unit identified in paragraph (b)2 of this subsection; and
2. Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis for:
 - a. Five (5) years following resumption of regular operations after the change; or
 - b. Ten (10) years following resumption of regular operations after the change if the project increases the design capacity or potential to emit of the regulated NSR pollutant at the emissions unit.

(d)1. If the emissions unit is an existing EUSGU, before beginning actual construction, the owner or operator:

- a. Shall provide a copy of the information in paragraph (b) of this subsection to the cabinet; but
- b. Shall not be required to obtain a determination from the cabinet before beginning actual construction.

2. Shall submit a report to the cabinet within sixty (60) days after the end of each year during which records are required to be generated under paragraph (b) of this subsection that set out the unit's annual emissions during the calendar year that preceded submission of the report.

(e)1. For an existing unit other than an EUSGU, the owner or operator shall submit a report to the cabinet if:

- a. The annual emissions, in tons per year, from a project identified in paragraph (a) of this subsection exceeds the baseline actual emissions, as documented and maintained pursuant to paragraph (b)3 of this subsection, by a significant amount for that regulated NSR pollutant; and
 - b. The emissions differ from the preconstruction projection as documented and maintained pursuant to paragraph (b)3 of this subsection.
2. The report shall be submitted within sixty (60) days after the end of the year during which records are required to be generated under paragraph (b) of this subsection and shall contain the following:

- a. The name, address and telephone number of the major stationary source;
- b. The annual emissions as calculated pursuant to paragraph (c) of this subsection; and
- c. Any other information that the owner or operator wishes to include in the report.

(f) The owner or operator of the source shall make the information required to be documented and maintained under this subsection available for review upon request for inspection by the cabinet or the general public pursuant to 401 KAR 52:100.

Section 17. Environmental Impact Statements. If a proposed source or modification is subject to action by a federal agency which might necessitate preparation of an environmental impact statement under 42 U.S.C. 4321 to 4370d (the National Environmental Policy Act), review by the cabinet conducted in accordance with this administrative regulation shall be coordinated with the broad environmental reviews under that Act and under 42 U.S.C. 7609 to the maximum extent feasible and reasonable.

Section 18. Innovative Control Technology. (1) An owner or operator of a proposed major stationary source or major modification may request the cabinet in writing to approve a system of innovative control technology.

(2) The cabinet may, with the consent of the governors of other affected states, determine that the source or modification may employ a system of innovative control technology if:

(a) The proposed control system will not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function;

(b) The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under Section 8(2) of this administrative regulation by a date specified by the cabinet. The date shall not be later than four (4) years from the time of start-up or seven (7) years from permit issuance;

(c) The source or modification will meet requirements equivalent to those in Sections 8 and 9 of this administrative regulation based on the emissions rate that the stationary source employing the system of innovative control technology will be required to meet on the date specified by the cabinet;

(d) The source or modification will not before the date specified by the cabinet:

1. Cause or contribute to a violation of an applicable national ambient air quality standard; or
2. Impact an area in which an applicable increment is known to be violated;

(e) Section 14 of this administrative regulation relating to Class I areas has been satisfied for all periods during the life of the source or modification; and

(f) All other applicable requirements including those for public participation have been met.

(3) The cabinet shall withdraw approval to employ a system of innovative control technology if:

- (a) The proposed system fails by the specified date to achieve the required continuous emissions reduction rate;
 - (b) The proposed system fails before the specified date and contributes to an unreasonable risk to public health, welfare, or safety; or
 - (c) The cabinet decides that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety.
- (4) If a source or modification fails to meet the required level of continuous emissions reduction within the specified time period or the approval is withdrawn in accordance with subsection (3) of this section, the cabinet may allow the source or modification up to an additional three (3) years to meet the requirement for the application of BACT through use of a demonstrated system of control.

Section 19. Permit Condition Rescission. (1)(a) An owner or operator holding a permit for a stationary source or modification which contains conditions pursuant to 401 KAR 51:015 or 401 KAR 51:016E may request that the cabinet rescind the applicable conditions.

(b) An owner or operator of a stationary source or modification who holds a permit for the source or modification which was issued under this administrative regulation as in effect on July 30, 1987, or an earlier version of this administrative regulation, may request that the cabinet rescind the permit or a particular portion of the permit.

(2) The cabinet shall rescind a permit condition if requested and if the applicant can demonstrate to the satisfaction of the cabinet that this administrative regulation does not apply to the source or modification or to a portion of the source or modification.

Section 20. Clean Unit Test for Emissions Units that are Subject to BACT or LAER. For any emissions unit that is subject to BACT or LAER and for which the cabinet has issued a major NSR permit in the past ten (10) years, an owner or operator of a major stationary source may use the clean unit test provisions specified in this section to determine if an emissions increase at a clean unit is part of a project that is a major modification.

(1) General provisions for clean units.

(a) The cabinet shall make a separate clean unit designation for each pollutant emitted by an emissions unit for which the emissions unit qualifies as a clean unit.

(b) A project for which the owner or operator begins actual construction shall be considered to have occurred while the emissions unit is a clean unit, if actual construction begins:

- 1. After the effective date of the clean unit designation as determined pursuant to subsection (3) of this section; and
- 2. Before the expiration date of the clean unit designation as determined pursuant to subsection (4) of this section.

(c) For an emissions unit to retain its clean unit designation during a project at a clean unit, the project shall not:

- 1. Cause the need for a change in the emissions limitations or work practice requirements adopted in conjunction with BACT in the permit for the unit; and
- 2. Alter any physical or operational characteristics that formed the basis for the BACT determination as specified in subsection (5)(d) of this section.

(d) Unless an emissions unit requalifies as a clean unit according to subsection (2)(b) of this section, the unit shall lose its designation as a clean unit upon issuance of the necessary permit revisions, if:

- 1. The project causes the need for a change in the emissions limitations or work practice requirements that were determined in conjunction with BACT in the permit for the unit; or
- 2. The project will alter any physical or operational characteristics that formed the basis for the BACT determination as specified in subsection (5)(d) of this section.

(e) Clean unit designation shall end immediately prior to the time actual construction begins on a project that will cause a unit to lose its clean unit designation if the owner or operator begins actual construction on a project before applying for a permit revision.

(f) A project that causes an emissions unit to lose its clean unit designation shall be subject to the applicability requirements of Section 1(4)(a)1, 2, and 4 and (b) of this administrative regulation as if the emissions unit is not a clean unit.

(2) Qualifying or requalifying to use the clean unit applicability test.

(a) An emissions unit shall automatically qualify as a clean unit if the unit meets the requirements in this paragraph.

1. Permitting requirement. The owner or operator of an emissions unit shall have received a major NSR permit within the past ten (10) years and shall maintain and provide information upon request by the cabinet or U.S. EPA to demonstrate that this permitting requirement is met.

2. Qualifying air pollution control technologies requirement. Air pollution emissions from the emissions unit shall be reduced through the use of air pollution control technology, including pollution prevention or work practices, that meets the following requirements:

a. The control technology shall achieve the BACT or LAER level of emissions reductions determined by issuance of a major NSR permit within the past ten (10) years;

b. The emissions unit shall not be eligible for the clean unit designation if the BACT determination did not result in a requirement to reduce emissions below the level of a standard, uncontrolled, new emissions unit of the same type; and

c. The owner or operator shall have made an investment to install the control technology. An investment shall include expenses to research the application of or to actually apply a pollution prevention technique to the emissions unit or to retool the unit to apply a pollution prevention technique.

(b) Requalifying for the clean unit designation. After the original clean unit designation expires or is lost, an emissions unit may re-qualify as a clean unit under the provisions of this paragraph or under Section 21 of this administrative regulation.

1. For an emissions unit that is requalifying for clean unit designation, an owner or operator shall obtain a new major NSR permit or permit revision, as applicable, issued pursuant to 401 KAR 52:020.

2. The permit shall require compliance with the current-day BACT or LAER, and the emissions unit shall meet the requirements in subsection (3)(a) of this section.

(3) Effective date of the clean unit designation. The date that the owner or operator may begin to use the clean unit test to determine if a project involving an emissions unit is a major modification shall be determined according to paragraph (a) or (b) of this subsection, as applicable.

(a) The effective date for an original clean unit designation and for an emissions unit that requalifies as a clean unit by implementing a new control technology to meet current day BACT shall be:

1. The earlier of the date the emissions unit's air pollution control technology is placed into service or three (3) years after the date the major NSR permit or permit revision is issued; and

2. No sooner than the date that provisions for clean units become effective in the Kentucky SIP.

(b) The effective date for emissions units that requalify for the clean unit designation using an existing control technology shall be the date the new major NSR permit or permit revision is issued.

(4) Clean unit expiration. The date the owner or operator shall no longer be allowed to use the clean unit test to determine if a project involving an emissions unit is, or is part of, a major modification shall be determined according to paragraph (a) or (b) of this subsection, as applicable.

(a) For an emissions unit that automatically qualifies as a clean unit under subsection (2)(a) of this section or a unit that requalifies by implementing new control technology to meet current-day BACT, the expiration date of the clean unit designation shall be:

1. Ten (10) years after the effective date or ten (10) years after the date the equipment went into service, whichever is earlier; or

2. At any time the owner or operator fails to comply with the provisions for maintaining the clean unit designation pursuant to subsection (6) of this section.

(b) The clean unit designation for an emissions unit that requalifies for the clean unit designation using an existing control technology shall expire:

1. Ten (10) years after the effective date; or

2. At any time the owner or operator fails to comply with the provisions for maintaining the clean unit designation according to subsection (6) of this section.

(5) Required Title V permit content for a clean unit. The Title V permit for a major stationary source with a clean unit shall, after the effective date of the clean unit designation and in accordance with the applicable provisions of 401 KAR Chapter 52, but not later than the date the Title V permit is renewed, include the following terms and conditions:

(a) A statement indicating that the emissions unit qualifies as a clean unit and identifying the pollutant for which this clean unit designation applies.

(b) The effective date of the clean unit designation.

1. If the exact effective date is not known on the date the clean unit designation is initially recorded in the Title V permit, the permit or permit revision shall describe the event that shall determine the effective date. Once the effective date is determined, the owner or operator shall notify the cabinet of the exact date; and

2. If originally absent from the Title V permit, the effective date of the clean unit shall be added to the Title V permit at the first opportunity for any reason the permit is opened, but not later than the next renewal.

(c) The expiration date of the clean unit designation.

1. If the exact expiration date is not known at the date the clean unit designation is initially recorded into the Title V permit, the permit shall describe the event that shall determine the expiration date;

2. Once the expiration date is determined, the owner or operator shall notify the cabinet of the exact date; and

3. If originally absent for the Title V permit, the expiration date shall be added to the Title V permit at the first opportunity for any reason the permit is opened, but not later than the next renewal.

(d) All emissions limitations and work practice requirements adopted in conjunction with BACT and any physical or operational characteristics that formed the basis for the BACT determination.

(e) Monitoring, recordkeeping, and reporting requirements as necessary to demonstrate that the emissions unit continues to meet the criteria for maintaining the clean unit designation pursuant to subsection (6) of this section.

(f) Terms reflecting the owner or operator's duty to maintain the clean unit designation and the consequences of failing to do so, pursuant to subsection (6) of this section.

(6) Maintaining the clean unit designation.

(a) The owner or operator of a clean unit shall conform to the provisions of this subsection to maintain the clean unit designation.

1. The clean unit shall comply with the emissions limitations or work practice requirements adopted in conjunction with the BACT that are recorded in the major NSR permit or permit revision and subsequently reflected in the Title V permit;

2. The owner or operator shall not make a physical change in or change in the method of operation of the clean unit that causes the emissions unit to function in a manner that is inconsistent with the physical or operational characteristics that formed the basis for the BACT determination;

3. The clean unit shall comply with all terms and conditions in the Title V permit related to the unit's clean unit designation; and

4. The clean unit shall continue to control emissions using the specific air pollution control technology that is the basis for its clean unit designation. The clean unit designation shall end if the emissions unit or control technology is replaced.

(b) The requirements of this subsection shall apply to each pollutant for which the cabinet has designated an emissions unit a clean unit. Failing to conform to the restrictions for one (1) pollutant shall only affect the clean unit designation for that pollutant.

(7) Netting at clean units.

(a) Emissions changes that occur at a clean unit shall not be included in calculating a significant net emissions increase to be used in a netting analysis unless:

1. Such use occurs before the effective date of the clean unit designation, or after the clean unit designation expires; or

2. The emissions unit reduces emissions below the level that qualified the unit as a clean unit.

(b) The owner or operator may generate a credit for the difference between the level that qualified the unit as a clean unit and the new emissions limitation if:

1. The unit reduces emissions below the level that qualified the unit as a clean unit; and

2. The reductions are surplus, quantifiable, and permanent.

(c) For generating offsets, reductions shall also be federally enforceable.

(d) For determining creditable net emissions increases and decreases, the reductions shall also be enforceable as a practical matter.

(8) Effect of area redesignation on clean units.

(a) The clean unit designation of an emissions unit shall not be affected by redesignation of the attainment status of the area in which it is located.

(b) If an existing clean unit designation expires or is lost, the unit shall requalify as a clean unit according to the requirements currently applicable in the area, regardless of the area's original attainment status during the previous designation period.

Section 21. Clean Unit Provisions for Emissions Units that Achieve an Emissions Limitation Comparable to BACT. For an emissions unit at a major stationary source that does not qualify as a clean unit under Section 20 of this administrative regulation but is achieving a level of emissions control comparable to BACT, the owner or operator may use the clean unit test specified in this section to determine if an emissions increase at the unit is part of a project that is a major modification.

(1) General provisions for clean units.

(a) The cabinet shall make a separate clean unit designation for each pollutant emitted by an emissions unit for which the emissions unit qualifies as a clean unit.

(b) A project for which the owner or operator begins actual construction shall be considered to have occurred while the emissions unit is a clean unit, if actual construction begins:

1. After the effective date of the clean unit designation as determined pursuant to subsection (4) of this section; and

2. Before the expiration date of the clean unit designation as determined pursuant to subsection (5) of this section.

(c) For an emissions unit to retain its clean unit designation during a project at a clean unit, the project shall not:

1. Cause the need for a change in the emissions limitations or work practice requirements in the permit for the unit that have been determined to be comparable to BACT according to subsection (3) of this section; and

2. Alter any physical or operational characteristics that formed the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to BACT according to subsection (7)(d) of this section.

(d) Unless an emissions unit requalifies as a clean unit according to subsection (2)(b) of this section, the unit shall lose its designation as a clean unit upon issuance of the necessary permit revisions, if:

1. The project causes the need for a change in the emissions limitations or work practice requirements in the permit for the unit that have been determined to be comparable to BACT; or

2. The project will alter any physical or operational characteristics that formed the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to BACT.

(e) Clean unit designation shall end immediately prior to the time actual construction begins on a project that will cause a unit to lose its clean unit designation, if the owner or operator begins actual construction on a project before applying for a permit revision.

(f) A project that causes an emissions unit to lose its clean unit designation shall be subject to the applicability requirements of Section 1(4)(a)1, 2, and 4 and (b) of this administrative regulation as if the emissions unit is not a clean unit.

(2) Qualifying or requalifying to use the clean unit applicability test.

(a) An emissions unit shall qualify as a clean unit if the unit meets the requirements in this paragraph.

1. Qualifying air pollution control technology requirement. Air pollutant emissions from an emissions unit shall be reduced through the use of air pollution control technology, including pollution prevention or work practices, and the owner or operator shall:

a. Demonstrate that an emissions unit's control technology is comparable to BACT according to the requirements of subsection (3) of this section;

b. Demonstrate that an emissions unit's control technology reduces emissions below the level of a standard, uncontrolled emissions unit of the same type; and

c. Have made an investment to install the control technology. An investment shall include expenses to research the application of, or to actually apply, a pollution prevention technique to the emissions unit or to retool the unit to apply a pollution prevention technique.

2. Impact of emissions from the unit requirement. The allowable emissions from the emissions unit, as determined by the cabinet, shall not:
 - a. Cause or contribute to a violation of any national ambient air quality standard or PSD increment; or
 - b. Adversely impact visibility or another air quality related value that has been identified as a federal Class I area by a federal land manager and for which information is available to the general public.
3. Date of installation requirement.
 - a. For control technology installed before provisions for clean units are effective in the Kentucky SIP, the owner or operator of an emissions unit with control technology on which a clean unit designation is based, shall apply for clean unit designation within two (2) years after the requirements for clean units become effective in the Kentucky SIP.
 - b. For control technology installed after the provisions for clean units become effective in the Kentucky SIP, the owner or operator shall apply for clean unit designation at the time the control technology is installed.
 - (b) Requalifying as a clean unit. An emissions unit may requalify as a clean unit after the original clean unit designation expires or is lost according to provisions in subsections (6) and (7) of this section or under clean unit provisions in Section 20 of this administrative regulation.
 1. The owner or operator shall obtain a new permit or permit revision pursuant to subsections (6) and (7) of this section and 401 KAR 52:020 that demonstrates the emissions unit's control technology is achieving a level of emissions control comparable to current-day BACT.
 2. The emissions unit shall meet the requirements of subsections (2)(a)1 and 2 of this section.
 - (3) Demonstrating control effectiveness comparable to BACT. The owner or operator shall demonstrate that the emissions unit's control technology is comparable to BACT under the provisions of either paragraph (a) or (b) of this subsection.
 - (a) Comparison of the control technology to previous BACT and LAER determinations.
 1. An emissions unit's control technology shall be presumed to be comparable to BACT if:
 - a. The control technology achieves an emissions limitation that is equal to or better than the average of the emissions limitation achieved by all the sources for which a BACT or LAER determination has been made within the preceding five (5) years and entered into the RACT/BACT/LAER Clearinghouse; and
 - b. Application of the BACT or LAER control technology to the emissions unit is technically feasible.
 2. To determine the accuracy of any presumptive determination that an achieved-in-practice control technology is comparable to BACT, the cabinet shall:
 - a. Consider any information on achieved-in-practice pollution control technologies that is provided during the public comment period; and
 - b. Compare this presumption to any additional BACT or LAER determinations of which the cabinet is aware.
 - (b) The substantially-as-effective test. The owner or operator may demonstrate that the emissions unit's control technology is substantially as effective as BACT pursuant to this paragraph. The cabinet:
 1. Shall consider the evidence on a case-by-case basis that an owner or operator, and any other person during the public participation process, provides to the cabinet to demonstrate if the emissions unit's control technology is substantially as effective as BACT; and
 2. Shall determine if the emissions unit's air pollution control technology is substantially as effective as BACT after considering the evidence.
 - (c) Time of comparison.
 1. Emissions units with control technologies installed before provisions for clean units are effective in the Kentucky SIP. The owner or operator of an emissions unit for which control technology is installed before the provisions regarding clean units are effective in the Kentucky SIP shall demonstrate to the cabinet that the emissions limitation achieved by the emissions unit's control technology is comparable to:
 - a. The BACT requirements that applied at the time the control technology was installed; or
 - b. The current-day BACT requirements.
 2. Emissions units with control technologies installed after provisions for clean units are effective in the Kentucky SIP. The owner or operator of an emissions unit for which control technology is installed after the provisions regarding clean units are effective in the Kentucky SIP shall demonstrate to the cabinet that the emissions limitation achieved by the emissions unit's control technology is comparable to current-day BACT requirements.
 - (4) Effective date of the clean unit designation. The date that the owner or operator may begin to use the clean unit test to determine if a project involving an emissions unit is a major modification shall be the later of:
 - (a) The date that the permit or permit revision required by subsection (6) of this section is issued; or
 - (b) The date that the emissions unit's air pollution control technology is placed into service.
 - (5) Clean unit expiration. The date the owner or operator shall no longer be allowed to use the clean unit test to determine if a project involving an emissions unit is, or is part of, a major modification shall be determined according to this subsection.
 - (a) For an emissions unit with a clean unit designation based on a demonstration by the owner or operator that the emissions unit's control technology is comparable to the BACT requirements that applied at the time the control technology was installed, the clean unit designation shall expire ten (10) years from the date the unit's control technology was installed.
 - (b) For all other emissions units, the clean unit designation shall expire ten (10) years from the effective date of the clean unit designation.
 - (c) The clean unit designation shall expire at any time the owner or operator fails to comply with the provisions for maintaining the clean unit designation according to subsection (8) of this section.
- (6) Procedures for designating emissions units as clean units.
 - (a) The cabinet shall designate an emissions unit a clean unit by issuing a permit or permit revision under 401 KAR Chapter 52, including requirements for public notice of the proposed clean unit designation and opportunity for public comment; and
 - (b) The permit or permit revision shall meet the requirements of subsection (7) of this section.
- (7) Required permit content. The Title V permit for a major stationary source with a clean unit shall, after the effective date of the clean unit designation and in accordance with the applicable provisions of 401 KAR Chapter 52, but not later than the date the Title V permit is renewed, include the following terms and conditions:
 - (a) A statement indicating that the emissions unit qualifies as a clean unit and identifying the pollutant for which the clean unit designation applies;
 - (b) The effective date of clean unit designation.
 1. If the effective date is not known on the date the clean unit designation is initially recorded in the Title V permit, the permit or permit revisions shall describe the event that shall determine the effective date. Once the effective date is determined, the owner or operator shall notify the cabinet of the exact date; and
 2. If originally absent from the Title V permit, the effective date of the clean unit shall be added to the Title V permit at the first opportunity the permit is opened, but not later than the next renewal;
 - (c) The expiration date of clean unit designation:
 1. If the expiration date is not known on the date the clean unit designation is initially recorded in the Title V permit, the permit or permit revision shall describe the event that shall determine the expiration date;
 2. Once the expiration date is determined, the owner or operator shall notify the cabinet of the exact date; and
 3. If originally absent from the Title V permit, the expiration date shall be added to the Title V permit at the first opportunity the permit is opened, but not later than the next renewal;
 - (d) All emissions limitations and work practice requirements adopted in conjunction with emissions limitations necessary to assure the control technology continues to achieve an emissions limitation comparable to BACT and any physical or operational characteristics that formed the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to BACT;
 - (e) Monitoring, recordkeeping, and reporting requirements as necessary to demonstrate that the emissions unit continues to meet the criteria for maintaining the clean unit designation pursuant to subsection (8) of this section; and
 - (f) Terms reflecting the owner or operator's duty to maintain the clean unit designation and the consequences of failing to do so, pursuant to subsection (8) of this section.
- (8) Maintaining the clean unit designation.

- (a) The owner or operator shall conform to the provisions of this subsection to maintain clean unit status.
 - 1. To ensure that the control technology continues to achieve emissions control comparable to BACT, the clean unit shall comply with the emissions limitations or work practice requirements adopted in conjunction with those that are comparable to BACT, which are recorded in the source's major NSR permit or permit revisions and subsequently reflected in the Title V permit that designates the unit as a clean unit.
 - 2. The owner or operator shall not make a physical change in or change in the method of operation of the clean unit that causes the emissions unit to function in a manner that is inconsistent with the physical or operational characteristics that formed the basis for the determination that the control technology is achieving a level of emissions control that is comparable to BACT.
 - 3. The clean unit shall comply with all terms and conditions in the Title V permit related to the unit's clean unit designation.
 - 4. The clean unit shall continue to control emissions using the specific air pollution control technology that was the basis for its clean unit designation. The clean unit designation shall end if the emissions unit or control technology is replaced.
- (b) The requirements of this subsection shall apply to each pollutant for which the cabinet has designated an emissions unit a clean unit. Failing to conform to the restrictions for one (1) pollutant shall only affect the clean unit designation for that pollutant.
- (9) Netting at clean units.
 - (a) Emissions changes that occur at a clean unit shall not be included in calculating a significant net emissions increase to be used in a netting analysis, unless:
 - 1. Such use occurs before the date the clean unit provisions are effective in the Kentucky SIP or after the clean unit designation expires; or
 - 2. The emissions unit reduces emissions below the level that qualified the unit as a clean unit.
 - (b) The owner or operator may generate a credit for the difference between the level that qualified the unit as a clean unit and the new emissions limitation, if:
 - 1. The unit reduces emissions below the level that qualified the unit as a clean unit; and
 - 2. The reductions are surplus, quantifiable, and permanent.
- (c) For generating offsets, reductions shall also be federally enforceable.
- (d) For determining creditable net emissions increases and decreases, the reductions shall also be enforceable as a practical matter.
- (10) Effect of area redesignation on clean units.
 - (a) The clean unit designation of an emissions unit shall not be affected by redesignation of the attainment status of the area in which it is located.
 - (b) If an existing clean unit designation expires or is lost, the unit shall requalify as a clean unit according to the requirements that are currently applicable in the area, regardless of the area's original attainment status during the previous designation period.

Section 22. PCP Exclusion Procedural Requirements. For a project to qualify for a pollution control project (PCP) exclusion, an owner or operator shall comply with the provisions of this section.

- (1) To request a PCP designation for a project the owner or operator shall:
 - (a) Submit a notice to the cabinet before beginning actual construction for a project that is listed in the definition for "pollution control project" in 401 KAR 51:001, Section 1(188)(a) to (f); or
 - (b) Submit an application for a permit or permit revision and obtain approval to use the PCP exclusion from the cabinet according to subsection (5) of this section for a project that is not listed in the definition at 401 KAR 51:001, Section 1(188)(a) to (f).
- (2) The owner or operator for all projects that rely on the PCP exclusion shall perform:
 - (a) An environmentally-beneficial analysis.
 - 1. The environmental benefit from the emissions reductions of pollutants regulated under 42 U.S.C. 7401 to 7671q (Clean Air Act) shall outweigh the environmental detriment of emissions increases in pollutants regulated under the Act; and
 - 2. A statement that the project is implementing a technology from those listed in 401 KAR 51:001, Section 1(188)(a) to (f) shall satisfy the requirement in subparagraph 1 of this paragraph.
 - (b) An air quality analysis. The emissions increases from the project shall not:
 - 1. Cause or contribute to a violation of any national ambient air quality standard or PSD increment; or
 - 2. Adversely impact visibility or another air quality related value that has been identified for a federal Class I area by a federal land manager and for which information is available to the general public.
- (3) Content of notice or application for a permit or permit revision. The owner or operator shall include the following information in the notice or application for a permit or permit revision submitted to the cabinet for a PCP:
 - (a) A description of the project;
 - (b) The potential emissions increases and decreases of any pollutant regulated under the Act and the projected emissions increases and decreases using the methodology in Section 1(4) of this administrative regulation that will result from the project;
 - (c) A copy of the environmentally-beneficial analysis required by subsection (2)(a) of this section;
 - (d) A description of all methods, including monitoring and recordkeeping, that shall be used on an ongoing basis to demonstrate that the project is environmentally beneficial and sufficient to meet the applicable requirements of 401 KAR Chapter 52;
 - (e) A certification that the project shall be designed and operated in a manner that is consistent with:
 - 1. The proper industry and engineering practices;
 - 2. The environmentally-beneficial analysis and air quality analysis required by subsection (2)(a) and (b) of this section;
 - 3. The information submitted in the notice or permit application; and
 - 4. Procedures that minimize emissions of collateral pollutants within the physical configuration and operational standards usually associated with the emissions control device or strategy; and
 - (f) Demonstration that the PCP shall not have an adverse air quality impact.
 - 1. The demonstration requirement may be satisfied with modeling, screening level modeling results, a statement that the collateral emissions increase is included within the parameters used in the most recent modeling exercise as required by subsection (2)(b) of this section, or another method approved by the cabinet; and
 - 2. An air quality impact analysis shall not be required for any pollutant that will not experience a significant emissions increase from the project.
- (4) Notice process for listed projects. The owner or operator:
 - (a) May begin actual construction of a PCP project immediately after notice is sent to the cabinet for projects listed in the definition of "pollution control project" in 401 KAR 51:001, Section 1(188)(a) to (f); and
 - (b) Shall respond to any requests by the cabinet for additional information necessary to evaluate the suitability of the project for a PCP exclusion.
- (5) Permitting process for unlisted projects.
 - (a) The owner or operator shall not begin actual construction of a PCP that is not listed in 401 KAR 51:001, Section 1(188)(a) to (f) until the cabinet approves and issues a permit or permit revision for the project consistent with 40 C.F.R. 51.160 and 51.161. These procedures shall include the cabinet providing the public with:
 - 1. Notice of the proposed approval;
 - 2. Access to the environmentally-beneficial analysis and the air quality analysis; and
 - 3. At least a thirty (30) day period for the public and the U.S. EPA to submit comments.
 - (b) The cabinet shall address all material comments received by the end of the comment period before taking final action on the permit or permit revision.
- (6) Operational requirements. Upon installation of a PCP, the owner or operator shall comply with the requirements of this subsection.
 - (a) General duty. The owner or operator shall operate the PCP in a manner that is consistent with:
 - 1. Proper industry and engineering practices;

2. The environmentally-beneficial analysis and air quality analysis required by subsection (2)(a) and (b) of this section;
 3. Information submitted in the notice or application for a permit or permit revision required by subsection (3) of this section; and
 4. Procedures that minimize emissions of collateral pollutants within the physical configuration and operational standards usually associated with the emissions control device or strategy.
- (b) Recordkeeping to prove that the PCP is operated consistent with the general duty requirements in paragraph (a) of this subsection, the owner or operator shall maintain copies on site, of:
1. The environmentally-beneficial analysis;
 2. The air quality impacts analysis; and,
 3. The monitoring and other emissions records.
- (c) Permit requirements. The owner or operator shall comply with all provisions in a permit issued under 401 KAR 52:020 related to use and approval of the PCP exclusion.
- (d) Generation of emissions reduction credits.
1. Emissions reductions created by a PCP shall not be included in calculating a significant net emissions increase unless the emissions unit further reduces emissions after qualifying for the PCP exclusion;
 2. The owner or operator may generate a credit for the difference between the level of reduction that was used to qualify for the PCP exclusion and the new emissions limitation if such reductions are surplus, quantifiable, and permanent;
 3. For generating offsets, the reductions shall be federally enforceable; and
 4. For determining creditable net emissions increases and decreases, the reductions shall also be enforceable as a practical matter.

Section 23. Plant-wide Applicability Limit Provisions. The cabinet may approve the use of an actuals PAL (PAL) for an existing major stationary source if the PAL meets the requirements of this section.

- (1) General provisions.
- (a) An owner or operator may execute a project without triggering major NSR, if the source maintains its total source-wide emissions below the PAL level, meets the requirements in this section, and complies with the PAL permit. If these conditions are met, a project:
1. Shall not be considered a major modification for the PAL pollutant;
 2. Shall not have to be approved through Kentucky's major NSR program; and
 3. Shall not be subject to the provisions of Section 16(4) of this administrative regulation concerning restrictions on relaxing enforceable emission limitations that a major stationary source used to avoid applicability of the major NSR program.
- (b) Except as provided under subparagraph (1)(a)3 of this section, a major stationary source shall continue to comply with all applicable federal or state requirements, emissions limitations, and work practice requirements that were established prior to the effective date of the PAL.
- (2) Permit application requirements. The owner or operator of a major stationary source shall submit the following information to the cabinet for approval as part of an application for a permit or permit revision requesting a PAL:
- (a) A list of all emissions units at the source designated as small, significant or major, based on their potential to emit;
 - (b) Identification of the federal and state applicable requirements, emissions limitations, and work practice requirements that apply to each emissions unit;
 - (c) Calculations of the baseline actual emissions for the emissions units with supporting documentation, including emissions associated with startup, shutdown and malfunction; and
 - (d) The calculation procedures the owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a twelve (12) month rolling total for each month as required by subsection (12)(a) of this section.
- (3) Establishing a PAL. The cabinet shall establish a PAL at a major stationary source in a federally enforceable permit pursuant to the requirements of this section.
- (a) The PAL shall impose an annual emissions limitation in tons per year that is enforceable as a practical matter for the entire major stationary source.
1. For each month during the PAL effective period after the first twelve (12) months of establishing a PAL, the owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous twelve (12) consecutive months is less than the PAL as a twelve (12) month average, rolled monthly; and
 2. For each month during the first eleven (11) months from the PAL effective date, the owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.
- (b) The PAL shall be established in a PAL permit that:
1. Meets the public participation requirements in subsection (4) of this section; and
 2. Contains all the requirements of subsection (6) of this section;
- (c) A PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major stationary source;
- (d) Each PAL shall regulate emissions of only one (1) pollutant;
- (e) Each PAL shall have a PAL effective period of ten (10) years;
- (f) The owner or operator of a major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements of subsections (11) to (13) of this section for each emissions unit under the PAL through the PAL effective period;
- (g) Emissions reductions of a PAL pollutant that occur during the PAL effective period shall not be creditable as decreases for offsets under 40 C.F.R. 51.165(a)(3)(ii), unless:
1. The level of the PAL is reduced by the amount of the emissions reductions; and
 2. The reductions will be creditable in the absence of the PAL.
- (4) Public participation requirements. PALs for existing major stationary sources shall be established, renewed, or increased pursuant to this subsection and the applicable procedures of 401 KAR 52:100. The cabinet shall:
- (a) Provide the public with notice of the proposed approval of a PAL permit with at least a thirty (30) day period for submittal of public comment; and
 - (b) Address all material comments before taking final action on a PAL permit or permit revision.
- (5) Setting the ten (10) year PAL level.
- (a) The PAL level for a major stationary source shall be the sum of the baseline actual emissions of the PAL pollutant for each emissions unit at the source during the chosen twenty-four (24) month period plus the applicable significant level for the PAL pollutant under the definition for "significant" in 401 KAR 51:001, Section 1(221) or under the Act, whichever is lower.
- (b) In establishing a PAL level for a PAL pollutant, only one (1) consecutive twenty-four (24) month period shall be used to determine the baseline actual emissions for all existing emissions units.
- (c) A different consecutive twenty-four (24) month period may be used for each different PAL pollutant.
- (d) Emissions associated with units that were permanently shutdown after the chosen twenty-four (24) month period shall be subtracted from the PAL level.
- (e) Emissions from units for which actual construction began after the twenty-four (24) month period shall be added to the PAL level in an amount equal to the potential to emit of the units.
- (f) The cabinet shall specify a reduced PAL level in the PAL permit to become effective on the future compliance date of any applicable federal or state regulatory requirement that the cabinet is aware of prior to issuance of the PAL permit.
- (6) Contents of the PAL permit. The PAL permit shall contain the following information:
- (a) The PAL pollutant and the applicable source-wide emissions limitation in tons per year;
 - (b) The PAL permit effective date and the expiration date of the PAL or PAL effective period;

(c) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL under subsection (9) of this section before the end of the PAL effective period, the PAL shall remain in effect until a revised PAL permit is issued by the cabinet;

(d) A requirement that emissions calculations for compliance purposes include emissions from startups, shutdowns and malfunctions;

(e) A requirement that, once the PAL expires, the major stationary source is subject to the requirements of subsection (8) of this section;

(f) The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a twelve (12) month rolling total for each month as required by subsection (12)(a) of this section;

(g) A requirement that the major stationary source owner or operator shall monitor all emissions units in accordance with the provisions in subsection (12) of this section;

(h) A requirement that the owner or operator shall retain the records required under subsection (12) of this section on site. Records may be retained in an electronic format or another acceptable format approved by the cabinet;

(i) A requirement for the owner or operator to submit the reports required under subsection (13) of this section by the required deadlines; and

(j) Other requirements necessary to implement and enforce the PAL.

(7) PAL effective period and reopening of a PAL permit.

(a) A PAL effective period shall be ten (10) years.

(b) The cabinet shall reopen a PAL permit to:

1. Correct typographical or calculation errors made in setting the PAL;
2. Reflect a more accurate determination of emissions used to establish the PAL;
3. Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under 40 C.F.R. 51.165(a)(3)(ii); or
4. Revise the PAL to reflect an increase in the PAL according to subsection (10) of this section.

(c) The cabinet may reopen the PAL permit, during the PAL effective period, to:

1. Reduce the PAL to reflect newly applicable federal requirements with compliance dates after the PAL effective date;
2. Reduce the PAL consistent with any other requirement that is enforceable as a practical matter and imposed on the major stationary source under the SIP; and
3. Reduce the PAL if the cabinet determines that a reduction is necessary to avoid causing or contributing to:
 - a. A National Ambient Air Quality Standard (NAAQS) or PSD increment violation; or
 - b. An adverse impact on visibility or another air quality related value that has been identified for a federal Class I area by a federal land manager and for which information is available to the general public.

(d) All permit reopenings shall be carried out under the public participation requirements of subsection (4) of this section except for permit reopenings to correct typographical or calculation of errors that do not increase the PAL level.

(8) Expiration of a PAL. A PAL that is not renewed shall expire at the end of the PAL effective period and the requirements of this subsection shall then apply.

(a) Each emissions unit, or each group of emissions units, that existed under the PAL shall comply with an allowable emissions limitations under a revised permit established as follows:

1. An owner or operator of a major stationary source using a PAL shall submit a proposed allowable emissions limitation for each emissions unit, or each group of emissions units, by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL.
 - a. This proposal shall be submitted to the cabinet at least six (6) months before the expiration of the PAL permit but not sooner than eighteen (18) months before permit expiration.
 - b. If the PAL has not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under subsection (9)(e) of this section, distribution of allowable emissions shall be made as if the PAL has been adjusted.
2. The cabinet shall decide the date and procedure the owner or operator shall use to distribute the PAL allowable emissions.
3. The cabinet shall issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the cabinet determines is appropriate.

(b) Each emissions unit shall comply with the allowable emissions limitation on a twelve (12) month rolling basis. The cabinet may approve the use of monitoring systems other than CEMS, CERMS, PEMS or CPMS to demonstrate compliance with the allowable emissions limitation.

(c) The source shall continue to comply with a source-wide, multiunit emissions cap equivalent to the level of the PAL emissions limitation until the cabinet issues the revised permit incorporating allowable limits for each emissions unit or each group of emissions units.

(d) A major modification at the major stationary source shall be subject to major NSR requirements.

(e) The major stationary source owner or operator shall continue to comply with any state or federal applicable requirements eliminated by the PAL that applied during or before the PAL effective period, except for those emissions limitations established pursuant to Section 16(4) of this administrative regulation.

(9) Renewal of a PAL.

(a) Public participation requirements.

1. The cabinet shall follow the public participation procedures specified in subsection (4) of this section in approving a request to renew a PAL for a major stationary source.
2. The cabinet shall provide a written rationale for the proposed PAL level for public review and comment.
3. Any person may propose a PAL level for the source for consideration by the cabinet during the public review period.

(b) Application deadline.

1. A major stationary source owner or operator shall submit an application for renewal of a PAL at least six (6) months before the date of permit expiration but not earlier than eighteen (18) months before permit expiration.
2. The deadline for application submittal shall ensure that the permit shall not expire before the permit is renewed.
3. If a complete application for renewal is submitted within the timeframe specified in subparagraph 1 of this paragraph, the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.

(c) Application requirements. The application to renew a PAL permit shall contain:

1. The information required in subsection (2) of this section;
2. A proposed PAL level;
3. The sum of the potential to emit of all emissions units under the PAL with supporting documentation; and
4. Any other information the owner or operator wishes the cabinet to consider in determining the appropriate level to renew the PAL.

(d) PAL adjustment.

1. A PAL shall not exceed the source's potential to emit. The cabinet shall adjust the PAL downward if a source's potential to emit has declined below the PAL level.
2. The cabinet may renew the PAL at the same level as the current PAL if the sum of the baseline actual emissions for all emissions units at the source plus an amount equal to the significant level is equal to or greater than eighty (80) percent of the current PAL level, unless the sum is greater than the source's potential to emit.
3. If the sum of the baseline actual emissions for all emissions units at the source plus an amount equal to the significant level is less than eighty (80) percent of the current PAL level, the cabinet may set the PAL at a level that is determined to be:
 - a. More representative of the source's baseline actual emissions; or
 - b. Appropriate considering the following factors:
 - (i) Air quality needs;

(ii) Advances in control technology;

(iii) Anticipated economic growth in the area of the source;

(iv) The cabinet's goal of promoting voluntary emissions reductions;

(v) Cost effective emissions control alternatives; and

(vi) Other factors as specifically identified by the cabinet in its written rationale for setting the PAL level.

4. The cabinet shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of subsection (10) of this section.

(e) The PAL shall be adjusted at the time of PAL permit renewal or Title V permit renewal, whichever comes first, if:

1. The compliance date for a state or federal applicable requirement that applies to the PAL source occurs during the PAL effective period; and
2. The cabinet has not already adjusted for such requirement.

(10) Increasing a PAL during the PAL effective period. The cabinet may increase a PAL emissions limitation during the PAL effective period if the major stationary source complies with the provisions of this subsection.

(a) Application procedures. To request an increase in the PAL limit for a PAL major modification, the owner or operator of the major stationary source shall submit a complete application, which shall include:

1. Identification of the emissions units contributing to the increase in emissions that cause the source's emissions to equal or exceed its PAL;
2. Demonstration that the increased PAL, as calculated in paragraph (c) of this subsection, exceeds the PAL; and

a. The level of control that results from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding ten (10) years;

b. If an emissions unit currently complies with BACT or LAER, the assumed control level for that emissions unit shall be equal to the current level of BACT or LAER for that emissions unit; and

3. A statement that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

(b) NSR permit and compliance requirement. The owner or operator shall obtain a major NSR permit for all emissions units contributing to the increase in emissions for the PAL major modification.

1. A significant level shall not apply in deciding for which emissions units a major NSR permit shall be obtained; and
2. Emissions units that obtain a major NSR permit shall comply with any emissions requirements resulting from the major NSR process, even though the units shall also become subject to the PAL or shall continue to be subject to the PAL.

(c) Calculation of increased PAL. The cabinet shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT equivalent controls, plus the sum of the baseline actual emissions of the small emissions units.

(d) Public notice requirement. The public notice requirements of subsection (4) of this section shall be followed during PAL permit revision for an increased PAL level.

(11) Monitoring requirements for PALs.

(a) General requirements.

1. Each PAL permit shall contain enforceable requirements for the chosen monitoring system that accurately determines plant-wide emissions of the PAL pollutant in terms of mass per unit of time;
2. A monitoring system authorized for use in the PAL permit shall be:
 - a. Approved by the cabinet; and
 - b. Based on sound science and meet generally acceptable scientific procedures for data quality and manipulation;
3. The data generated by a monitoring system shall meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit;
4. The PAL monitoring system shall employ one (1) or more of the four (4) general monitoring approaches meeting the minimum requirements set forth in paragraph (b) of this subsection;
5. The cabinet may approve an alternative monitoring approach that meets the requirements of subparagraphs 1 to 3 of this paragraph; and
6. Failure to use a monitoring system that meets the requirements of this section shall render the PAL invalid.

(b) Minimum performance requirements for approved monitoring approaches. If conducted in accordance with the minimum requirements in paragraphs (c) to (i) of this subsection, the following shall be acceptable monitoring approaches:

1. Mass balance calculations for activities using coatings or solvents;
2. CEMS;
3. CPMS or PEMS; and
4. Emission factors.

(c) Mass balance calculations. An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coatings or solvents shall:

1. Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;
2. If the PAL pollutant cannot be accounted for in the process, assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit; and
3. If the vendor of the material or fuel from which the pollutant originates publishes a range, use the highest value of the published range of pollutant content to calculate the PAL pollutant emissions, unless the cabinet determines there is site-specific data or a site-specific monitoring program to support another pollutant content within the range.

(d) CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:

1. CEMS shall comply with applicable performance specifications found in 40 C.F.R. Part 60, Appendix B; and
2. CEMS shall sample, analyze, and record data at least every fifteen (15) minutes while the emissions unit is operating.

(e) CPMS or PEMS. An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:

1. The CPMS or the PEMS shall be based on current site-specific data demonstrating a correlation between the monitored parameter and the PAL pollutant emissions across the range of operation of the emissions unit; and
2. While the unit is operating, each CPMS or PEMS shall sample, analyze, and record data at least every fifteen (15) minutes, or at another less frequent interval approved by the cabinet.

(f) Emission factors. An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:

1. All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;
2. The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and
3. If technically practicable, the owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within six (6) months of PAL permit issuance, unless the cabinet determines that testing is not required.

(g) A source owner or operator shall record and report maximum potential emissions without considering enforceable emissions limitations or operational restrictions for an emissions unit during any period of time there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.

(h) If an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameters and the PAL pollutant emissions rate at all operating points of the emissions unit, as an alternative to the requirements of paragraphs (c) to (g) of this subsection, at the time of permit issuance the cabinet shall:

1. Establish default values for determining compliance with the PAL based on the highest potential emissions reasonably estimated at operating points; or
2. Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameters and the PAL pollutant emissions is a violation of the PAL.

(i) Revalidation. All data used to establish the PAL pollutant shall be revalidated through performance testing or other scientifically-valid means approved by the cabinet. Validation testing shall occur at least once every five (5) years after issuance of the PAL.

(12) Recordkeeping requirements.

(a) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of this section and of the PAL, including a determination of each emissions unit's twelve (12) month rolling total emissions for five (5) years from the date of the determination.

(b) The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus five (5) years:

1. A copy of the PAL permit application and any applications for revisions to the PAL; and
2. Each annual certification of compliance pursuant to Title V and the data used to certify compliance.

(13) Reporting and notification requirements. The owner or operator shall submit semiannual monitoring reports and prompt deviation reports to the cabinet in accordance with 401 KAR Chapter 52 that meet the following requirements:

(a) Semiannual report. The semiannual report shall be submitted to the cabinet within thirty (30) days of the end of each reporting period and shall contain:

1. The identification of owner and operator and the permit number;
2. Total annual emissions, in tpy, based on a twelve (12) month rolling total for each month in the reporting period recorded pursuant to subsection (12)(a) of this section;
3. All data used in calculating the monthly and annual PAL pollutant emissions, including any quality assurance or quality control data;
4. A list of any emissions units modified or added to the major stationary source during the preceding six (6) month period;
5. The number, duration, and cause of any deviations or monitoring malfunctions, other than the time associated with zero and span calibration checks, and any corrective action following a deviation;

6. A notification of permanent or temporary shutdown of any monitoring system including:

- a. The reason for the shutdown;
- b. The anticipated date that the monitoring system shall be fully operational or shall be replaced with another monitoring system;
- c. If applicable, a statement that the emissions unit monitored by the monitoring system continued to operate without the monitoring system; and
- d. The calculation of the emissions of the pollutant or the number determined according to subsection (11)(g) of this section that is included in the permit;

and

7. A signed statement by the responsible official, as defined by 401 KAR 52:001, certifying the truth, accuracy, and completeness of the information provided in the semiannual report.

(b) Deviation report. The major stationary source owner or operator shall submit reports of any deviation or exceedance of the PAL requirements, including periods monitoring is unavailable.

1. A report submitted pursuant to 40 C.F.R. 70.6(a)(3)(iii)(B) shall satisfy the deviation reporting requirement;

2. The deviation report shall be submitted within the time limits prescribed by 40 C.F.R. 70.6(a)(3)(iii)(B);

3. The deviation report shall contain the following information:

- a. The identification of the owner, the operator and the permit number;
- b. The PAL requirement that experienced the deviation or that was exceeded;
- c. Emissions resulting from the deviation or the exceedance; and
- d. A signed statement by the responsible official, as defined by 401 KAR 52:001, certifying the truth, accuracy, and completeness of the information provided in the report.

(c) Revalidation results. The owner or operator shall submit to the cabinet the results of any revalidation test or method within three (3) months after completion of the test or method.

(14) Transition requirements.

(a) After the U.S. EPA approves the Kentucky SIP revisions for the PAL provisions published in 67 Fed. Reg. 80186, December 31, 2002, the cabinet shall only issue a PAL that complies with the requirements of this section.

(b) The cabinet may supersede a PAL that was established before the date the U.S. EPA approves the Kentucky SIP revisions for the PAL provisions published in 67 Fed. Reg. 80186, December 31, 2002, with a PAL that complies with the requirements of this section.

Section 24. Incorporation by Reference. (1) The following material is incorporated by reference:

(a) "40 C.F.R. Part 51, Appendix W to Part 51 - Guideline on Air Quality Models, as published in the Code of Federal Regulations, July 1, 2003".

(b) "40 C.F.R. Part 58, Appendix B to Part 58 - Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring, as published in the Code of Federal Regulations, July 1, 2003".

(c) "40 C.F.R. Part 60, Appendix B to Part 60 - Performance Specifications, as published in the Code of Federal Regulations, July 1, 2003".

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the following main and regional offices of the Kentucky Division for Air Quality during the normal working hours of 8 a.m. to 4:30 p.m., local time:

- (a) Kentucky Division for Air Quality, 803 Schenkel Lane, Frankfort, Kentucky 40601-1403, (502) 573-3382;
- (b) Ashland Regional Office, 1550 Wolohan Drive, Suite 1, Ashland, Kentucky 41102, (606) 929-5285;
- (c) Bowling Green Regional Office, 1508 Westen Avenue, Bowling Green, Kentucky 42104, (270) 746-7475;
- (d) Florence Regional Office, 8020 Veterans Memorial Drive, Suite 110, Florence, Kentucky 41042, (859) 525-4923;
- (e) Hazard Regional Office, 233 Birch Street, Suite 2, Hazard, Kentucky 41701, (606) 435-6022;
- (f) London Regional Office, 875 S. Main Street, London, Kentucky 40741, (606) 878-0157;
- (g) Owensboro Regional Office, 3032 Alvey Park Drive, W., Suite 700, Owensboro, Kentucky 42303, (270) 687-7304;
- (h) Paducah Regional Office, 4500 Clarks River Road, Paducah, Kentucky 42003, (270) 898-8468; and
- (i) Frankfort Regional Office, 643 Teton Trail, Suite B, Frankfort, Kentucky 40601, (502) 564-3358.

(3) Copies of the Code of Federal Regulations and the Federal Register may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Attn: New Orders, P.O. Box 371954, Pittsburgh, Pennsylvania 15250-7954, phone (202) 512-1800, fax (202) 512-2250. (8 Ky.R. 1112; Am. 9 Ky.R. 350; eff. 9-22-82; 12 Ky.R. 869; 1263; eff. 2-4-86; 13 Ky.R. 924; eff. 12-2-86; 14 Ky.R. 883; eff. 12-11-87; 1601; eff. 4-14-88; 18 Ky.R. 2605; eff. 6-24-92; 23 Ky.R. 2203; 3009; eff. 3-12-97; 30 Ky.R. 2188; 2500; 31 Ky.R. 45; eff. 7-14-04.)